

REMARKS

Amendments

Based on the above amendments, claims 1-34 and 42-45, 47-51 are pending. Claims 1 and 49 are independent claims, both of which have been amended to include the limitations of claim 46, which has been canceled. Claims 50 and 51 are new dependent claims. Support for new claims 50 and 51 can be found in the Specification at, for example, page 3, lines 23-24.

Prior Art Rejections

Claims 1-13, 16-17, 19, 21-22, 25, 28-29, 33, 45-46 and 48-49 stand rejected as allegedly obvious over U.S. patent publication 2002/0137244 to Chen et al. (Chen) and the PCT publication WO 02/061855 to Noto et al.. The remaining claims stand rejected as allegedly obvious over Chen and Noto, further in view of additional references. As the PCT publication WO 02/061855 is in Japanese, Applicant refers to U.S. patent 6,847,056, which issued from Noto's PCT application (hereinafter referred to as "Noto").

As to independent claims 1 and 49, the Examiner concedes that Chen does not disclose "a first **non-epitaxially** formed ... current spreading layer," as recited in claims 1 and 49 (emphasis added). (See Paragraph 4 of Action.) The Examiner alleges finding such a teaching in the top and bottom electrode layers 6 and 8 of Fig. 1 in Noto, and argues that it would have been obvious to a person of ordinary skill in the art at the time of Applicants' invention to modify Chen to include this teaching based on Noto. (Id.)

We do not concede the merits of this proposed combination. However, to expedite allowance, Applicants have further amended claims 1 and 49 to include the limitations of previously pending claim 46. As a result, each independent claim now requires "a first non-epitaxially formed ... current spreading layer" and "a second non-epitaxially formed ... current spreading layer," wherein "the first current spreading layer comprises a first material and the second current spreading layer comprises a second material different from the first material."

However, the Examiner also rejected previously pending claim 46 in the last Action, alleging that: "Chen teaches the radiation-emitting semiconductor component as in claim 1,

wherein the first current spreading layer comprises a first material and the second current spreading layer comprises a second material different from the first material (layer 62 in fig. 6 and ITO layer in paragraph [0038]).” (Action at Paragraph 27.) We traverse.

Argument

The Action is wrong to point to layer 62 in Chen as the claimed first current spreading layer comprising a first material different from the second material in the second current spreading layer because layer 62 is not a “non-epitaxially formed ... current spreading layer” as required by independent claims 1 and 49. To the contrary, it is explicitly referred to as “epitaxial layer 62” in paragraph [0031], i.e., it is part of the semiconductor body.

As noted above, the Examiner points to Noto for the “non-epitaxially formed” claim limitation. But, Noto does not teach two different non-epitaxially formed current spreading layers, as now claimed. Rather, Noto expressly states that both the electrode layer 8 and electrode layer 10 are ITO layers (col. 8, lines 3 and 4). Thus, Noto uses two identical electrode layers.

Furthermore, Noto teaches a device “covered by the respective ITO electrode layers 8 and 10 with the InGaAs layer 7 and the InGaAs layer 9 interposed therebetween” in order to obtain a low series resistance. (See Noto at 8:22-24.) In other words, Noto teaches interposed epitaxial layers in order to obtain a low series resistance. See also Noto at 9:21-39. Thus, Noto does not provide any motivation for using two different non-epitaxial current spreading layers. Instead, Noto clearly and expressly teaches a device structure with identical ITO layers.

We submit that even if there were a reason to modify Chen to include the non-epitaxially formed layers disclosed by Noto, the clear teaching in Noto is to use identical materials for both of the non-epitaxially formed layers. The Action provides no reason for why a person of ordinary skill in the art would selectively choose certain teachings in Noto (e.g., the non-epitaxially formed layers) to modify Chen, and yet selectively ignore the associated teachings in Noto (that the non-epitaxially formed layers be the same.)

In contrast, independent claims 1 and 49 call for a device, wherein the second current spreading layer comprises a second material different from the first material of the first current spreading layer. For example, as explained in paragraph [0024] of the present Application

Publication, "the material of the current spreading layer concerned can advantageously be adapted to the adjacent material of the semiconductor body".

In view of the above, we submit that independent claims 1 and 49 as currently amended distinguish the cited prior art and are therefore allowable. The remaining dependent claims are allowable for at least the same reasons. Accordingly, we ask that the prior art rejections be withdrawn.

Conclusion

In view of the forgoing comments and the claim amendments, Applicants respectfully submit that all pending claims are in patentable condition, and ask that the application be allowed.

Any circumstance in which Applicants have: (a) addressed certain comments of the Examiner does not mean that Applicants concede other comments of the Examiner; (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims; or (c) amended or canceled a claim does not mean that Applicants concede any of the Examiner's positions with respect to that claim or other claims.

A Request for Continued Examination ("RCE") and an Information Disclosure Statement ("IDS") are being filed together with this response.

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The fees in the amount of \$52.00 for the extra claim are being paid concurrently on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to deposit account 06-1050, referencing 12406-0147US1.

Respectfully submitted,

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